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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,984	04/06/2004	Tsung-Jung Kuo	LITP0025USA	2983
27765	7590	12/20/2005	EXAMINER	
NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION P.O. BOX 506 MERRIFIELD, VA 22116			KAYRISH, MATTHEW	
			ART UNIT	PAPER NUMBER
			2653	
DATE MAILED: 12/20/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/708,984

Applicant(s)

KUO ET AL.

Examiner

Matthew G. Kayrish

Art Unit

2653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 6 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-7, 10, 12-19 and 21 are rejected under 35 U.S.C. 102(e) as being unpatentable over Huang (US Patent Number 6817020).
3. Regarding claims 1, 12 and 13, Huang et al disclose:

A disk force-ejection and force-loading device for use in an optical disk drive (Figure 4, item 110), the optical disk drive comprising an active gear of a drive motor for loading and ejecting an optical disk (Figure 6, item 116) and a housing comprising a position hole nearby the active gear of the drive motor (Figure 6, item 112), the disk force-ejection and force-loading device comprising:

A drive element installed on one end of the disk force-ejection and force-ejection device (Figure 6, item 114) for connecting and driving the active gear (Figure 6, shaft of item 114) of the drive motor (Figure 4, item 114) via the position hole (Figure 6);

A motivity provider for rotating the drive element (Figure 6, Item 114); and

A power provider for providing electric power to the motivity provider  
(Column 1, lines 22-23).

4. Regarding claims 2 and 14, Huang et al disclose:

The disk force-ejection and force-loading device of claim 1, wherein the  
drive element is a gear (Column 2, lines 54-55).

5. Regarding claims 3 and 15, Huang et al disclose:

The disk force-ejection and force-loading device of claim 1, wherein the  
motivity provider is a motor (Column 1, line 54).

6. Regarding claims 4 and 16, Huang et al disclose:

The disk force-ejection and force-loading device of claim 1, wherein the  
position hole is for matching a position element to connect the drive element and  
the active gear of the drive motor properly (See dashed lines of Figure 6).

7. Regarding claims 5 and 17, Huang et al disclose:

The disk force-ejection and force-loading device of claim 4, wherein the  
position element is connected to the motivity provider and positioned between  
the drive element and the motivity provider (Figure 6, Item 132 connects to Item  
114).

8. Regarding claims 6 and 18, Huang et al disclose:

The disk force-ejection and force-loading device of claim 2, wherein a  
terminal end of the drive element is connected to a terminal end of the active  
gear of the drive motor (Figure 7), and the position hole is positioned on the  
housing nearby the terminal end of the active gear of the drive motor (Figure 7).

9. Regarding claims 7 and 19, Huang et al disclose:

The disk force-ejection and force-loading device of claim 2, wherein a side of the drive element engages a side of the active gear of the drive motor, and the direction of the major axis of the drive element is parallel with the direction of the major axis of the active gear of the drive motor (Figure 7, Relocation of parts not changing the functionality), and the position hole is positioned on the housing nearby the terminal end of the active gear of the drive motor (Figure 7).

10. Regarding claims 10 and 21, Huang et al disclose:

The disk force-ejection and force-loading device of claim 1, wherein the disk force-ejection and force-loading device further comprising:

An outer covering (Figure 4, tray will cover the motor) for covering the motivity provider and the power provider; and

A control switch for switching action modes of the motivity provider (Figure 5, Item 118).

### ***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 8 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang, in view of Official Notice.

13. Regarding claims 8 and 20, Official Notice is taken that it is old and well known to have the motor axis perpendicular to the axis of a drive gear.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the motor either drive the gears from parallel or perpendicular positions since disc drives for computers have different positioning than for CD and DVD players, the accessibility to the gears can change, making it need a different motor positioning.

14. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Huang, in view of Tanaka (US Publication Number 2001/0050898).

15. Regarding claim 9, Huang fails to disclose et al disclose:

The disk force-ejection and force-loading device of claim 1, wherein the action modes of the motivity provider comprise a clockwise rotation for driving the drive element to rotate clockwise and a counterclockwise rotation for driving the drive element to rotate counterclockwise.

Tanaka et al disclose:

The disk force-ejection and force-loading device of claim 1, wherein the action modes of the motivity provider comprise a clockwise rotation for driving the drive element to rotate clockwise and a counterclockwise rotation for driving the drive element to rotate counterclockwise (Paragraph 21).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to give Tanaka's motivity provider to Huang in order to perform both load and eject actions.

16. Claims 11 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang, in view of Kanada (US Patent Number 6934957).

17. Regarding claims 11 and 22, Huang fails to disclose:

The disk force-ejection and force-loading device of claim 10, wherein the power provider is a battery.

Kanada et al disclose:

The optical disk drive of claim 21, wherein the power provider is a battery (Column 26, lines 55-57, implies motor runs off of battery).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to run Huang's motor from a battery, as taught by Kanada, for the purpose of portability.

### ***Conclusion***

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew G. Kayrish whose telephone number is 571-272-4220. The examiner can normally be reached on 8am - 5pm M-F.

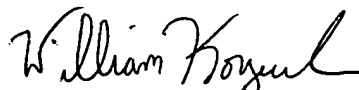
19. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on 571-272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2653

20. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MK

12-12-05

  
WILLIAM KORZUCH  
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